

Amendments to the Drawings:

Figure 1 has been amended to more clearly show the imaging system described in the background of the present invention including the “variety of different sized drums [are] provided”, as discussed in the background in paragraph 6 to better show “a variety of different sized drums.” as the Examiner requested. This addition has been made to a prior art drawing and is directly supported by the background of the specification in paragraph 6 and thus it does not add new matter to this application.

REMARKS

The Applicants note that the Examiner had previously allowed Claims 2-4, 9-11, 15 and 16 and now is indicating that they are not allowable. Applicants also note that the Examiner states that the following arguments were not persuasive since the “specification does not provide support for the argued subject matter”. The Applicants will discuss below where that support is and then argue why Koide, nor any of the cited prior art, does not teach the present invention. The Applicants have made changes to the claims to correct an editorial error where “imaging system” was mistakenly replaced by “imaging device.” and the “variety of different sized drums [are] provided”, as discussed in the background in paragraph 6 and partially shown in Figure 1 to better show “a variety of different sized drums.” as the Examiner requested. This addition has been made to a prior art drawing and is directly supported by the background of the specification in paragraph 6 and thus it does not add new matter to this application. The Applicants hereby request reconsideration and further examination.

The Applicants draw the Examiner’s attention to paragraphs [0006] and [0007] of the application which clearly state the problem to be solved by the current invention and state the following:

“[0006] A problem arises in recently emerging imaging systems that have facilities for changing the drum in normal operation. One such system is the ThermoFlex® imaging system sold by Creo Inc. of Burnaby, BC, Canada. The ThermoFlex® system is presently being upgraded with the capability of imaging on a drum or on a sleeve. A sleeve is simply a media that is supplied attached to a tubular substrate rather than the more conventional flat plate format. To accommodate differing sleeve diameters, a variety of different sized drums are provided. In practice, a drum shell of the correct diameter is loaded onto a common mandrel for loading a particular sleeve.”

“ [0007] Whenever the drum load is changed the control parameters for the rotational drive system must also be changed since these parameters are typically tuned for a specific load and may not work with the new load. This is an inconvenience for the user and there remains a need for seamless handling of the change between different drum loads.”

The Applicants also draw the Examiner’s attention to paragraphs [0020] and [0021] of the application which clearly state the solution to this problem that is solved by the current invention as recited below:

“[0020] A different drum load 10 may be accommodated by changing, for example, the inertia parameter in the controller algorithm. The parameter may be entered by an operator via a user interface to system controller 28. In this case, the user would have to know what the parameters for the new drum are, and correctly enter these into the system. A possibility of error exists, even if it is made simple for the operator by providing a list or menu of different drum sizes.

“ [0021] In the present invention a drive parameter estimator determines suitable parameters for driving the drive conditions. The parameters may be chosen and updated without the need for manual user input.”

[0028] Typically, when a drum load change is made the imaging system controller will be made aware that the change has occurred. The system is programmed to perform the method of FIG. 3 before attempting to spin the changed load under closed loop control. This method of characterizing a load is commonly referred to as parameter or system identification.

The paragraphs [0020] , [0021] and [0028] of the application make it clear that the specification supports the use of the invention including a “ method for accommodating different drum loads in an imaging system” and selecting of a “drum selected from a plurality of drums, wherein each drum comprises an associated drum load” as well as a “system for driving a drum load.” The specification, including these paragraphs describes the solution to the problem stated in paragraphs 6 and 7. These claimed elements, as well as other claim elements , such as “selecting a drum load from plurality of drum loads” are well supported by the specification and associated drawings as they now stand. The Applicants have added no new subject matter as discussed above. The Applicants did not mean to confuse the situation by the editorial error of replacing “imaging system” with “imaging device” in some claims.

The Examiner also states that “mounting the media on a drum selected from a plurality of drums, wherein each drum comprises an associated drum load” is not shown in the drawings. Only one claim even recites “media” and that is claim 37 and the media is clearly shown in Figure 1 so it is unclear why this is a problem. If the concern is instead the use of the term “imaging device” the Applicants have deleted this term from the claims and replaced it with “imaging system” which was the result of an editorial error. The Applicants also note that the term was only recited in the preamble of the claims.

The Applicants have elected to do this plus the change to Figure 1 in an effort to prevent this response from being considered a “non-responsive” response that would lead to abandonment. The Applicants do request that if this is not what

the Examiner meant to request and if this is not responsive to what the Examiner had in mind that the Applicants will gladly respond to any further concerns and to that extent the Applicants request a telephone conference to discuss any additional concerns so that this response does not result in further delays.

Concerning the claim objections to claims 1, 5-8, 12-14 and 17-28 claims 1 and 12, according to the Examiner on pp 2 of the July 27, '06 office action, cite "comprising a parameter of a relationship which relates an output of a drum controller", it is unclear to the Applicants where those words are found in either claim 1 or 12 but believes that the Examiner must be referring to claim 12 somehow and thus has attempted to amend claim 12 to overcome the objection. Since it is unclear specifically what language was objected to, the Applicants respectively requests that the Examiner communicate to the Applicants the specific language that is objected to and preferably call the undersigned to discuss the concern.

The rejection of Claim 1 states that Koide anticipates Claim 1 because it contains all the elements of claim 1 but Koide fails to teach or suggest "a) selecting a **drum load from a plurality of drum loads**" and "d) determining from the response a new value for **at least one control** parameter for driving the selected drum load, **the at least one control parameter varying for each of the plurality of drum loads**" [emphasis added].

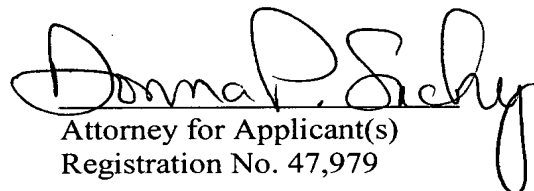
As stated in paragraph [0019] of the present application" "[t]he drum controller has a set of parameters stored in memory defining the physical system to be driven. These parameters may be parameters like the inertia of the drum load, the motor torque constant, the encoder resolution etc. The motor controller may store these parameters directly or a set of computed system gains may be stored instead. In closed loop operation the drum controller attempts to control the drive system to produce the speed requested by systems controller 28 by monitoring the actual speed of the drum load 10 provided by encoder 22 and constantly correcting for deviations. The algorithm uses the system gains or parameters to affect the control. Should one of these parameters, e.g. drum inertia be wrong, the drum speed may not be controllable."

The Examiner asserts that Claim 1 is anticipated by Figure 6; Col. 10, line 8 to Col. 13, line 15). As understood by the Applicants, in this section, Koide teaches a method of reducing speed variations of an image carrier associated with the eccentricity and tooth pitch errors of a **driven gear 103** associated with the

image carrier. To avoid accurate machining of the driven gear, Koide teaches assembling the driven gear in a particular fashion (Col 10, lines 45 to 49). Additionally, Koide teaches “[w]hile the drum 11 is generally replaced when its service life ends, the driven gear 103 is **usually not dismantled** from the printer. In light of the above, as shown in Figure 6, the drum drive unit of the illustrative embodiment is configured such that the given gear can be adjusted on the production line.” (Col 10, lines 55 – 60). Koide does not explicitly teach or suggest selecting a drum load from a plurality of drum loads. Koide does not teach or suggest “determining from the from the response **a new value for at least one control parameter for driving the selected load, the at least one control parameter varying for each of the plurality of drum loads**” since Koide teaches a method for reducing speed variations associated with the eccentricity and tooth pitch errors of **driven gear 103** which is not replaced when a drum is replaced when its service life ends.

In conclusion, Applicants respectfully submit that claims 1-19, 21-24 and 27-37 are allowable and hereby request such allowance and ask that the Examiner contact the undersigned if there are any further questions or editorial errors that only confuse and delay the prosecution of this case.

Respectfully submitted,


Attorney for Applicant(s)
Registration No. 47,979

Donna P. Suchy/tt
Rochester, NY 14650
Telephone: 585-722-9844
Facsimile: 585-477-1148

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.